## (19) World Intellectual Property Organization International Bureau



(43) International Publication Date 6 October 2005 (06.10.2005)

PCT

(10) International Publication Number WO 2005/092799 A1

(51) International Patent Classification<sup>7</sup>: C02F 1/44, B01D 61/04, 61/14

(21) International Application Number:

PCT/IB2005/051007

(22) International Filing Date: 24 March 2005 (24.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 2004901665 26 March 2004 (26.03.2004)

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, BG, BG, DG, EG, HG, MH, RH, UI, DL, LI, NI, SI, P, KE, KG, KP, KR, KZ, LC, LK, LR, 1.5, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, ZD, ED, KE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAP(BF, BJ, CF, CG, CL, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

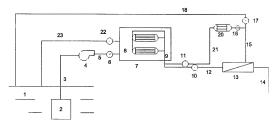
## Published:

with international search report

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS AND APPARATUS FOR PURIFYING IMPURE WATER USING MICROFILTRATION OR ULTRAFIL-TRATION IN COMBINATION WITH REVERSE OSMOSIS



(57) Abstract: A method of purifying impure water contaminated with a filterable impurity and a dissolved impurity, such as sea-water, comprising the steps of: providing impure water to a primary microfiltration or ultrafiltration unit to remote filterable impurity and produce impure filtered water contaminated with a dissolved impurity; providing the impure filtered water contaminated with a dissolved impurity; providing the impure filtered water contaminated with a dissolved impurity to a reverse comosis struit to produce a potable water stream and a residual reverse cosmosis stream prior to reuse. The treatment may be in the form of passing through a secondary filter (such as another microfiltration or ultrafiltration membrane or a cartridge filter, and the subsequently treated reverse cosmosis reject may be used to backwast the microfiltration or ultrafiltration unit.

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